

## IN THE CLAIMS

Please **CANCEL** claims 1-11 and 26-93 without prejudice or disclaimer, **AMEND** claims 12, 17 and 25; and **ADD** claims 94-115. A status of the claims is provided below.

1-11 (Cancelled)

12. (Currently Amended) A computer implemented method of access evolution for automating the sharing of access rights in a computer environment having one or more access sharing relationships, comprising the steps of:

a) creating an access sharing relationship in which an access provider having a first set of access rights shares at least a subset of the first set of access rights with an access receiver having a second set of access rights, so that the ~~receiver's~~ second set of access rights evolves as an automated function of the first set of access rights by way of the shared subset, wherein the access sharing relationship is one of one or more access sharing relationships in a network of access control;

b) defining the subset based on constraints of the access sharing relationship; and

c) sharing the subset with the access receiver,

~~wherein~~ whereby the steps of defining and sharing comprise an iteration of access evolution,

wherein the access provider has access rights to a newer version of an entity or file and the access receiver has access rights to an older version of the entity or file and deferring the sharing of the access rights to the newer version with the access receiver for a period of time, so that the access receiver has access to the older version prior to releasing a manage exclusion, and upon releasing a manage exclusion, the access receiver receiving access to the newer version, and

wherein the steps of creating, defining, and sharing are performed by a computer.

13. (Original) The computer implemented method of claim 12, wherein the sharing is implemented by derived access control, such that the access receiver derives access from the provider.

14. (Original) The computer implemented method of claim 12, wherein the access sharing relationship is a first access sharing relationship further comprising creating a second access sharing relationship in the computer environment, wherein the access receiver of the first access sharing relationship is also the access provider in the second access sharing relationship.

15. (Original) The computer implemented method of claim 12, wherein the access sharing relationship is a first access sharing relationship further comprising creating a second access sharing relationship in the computer environment, wherein the access provider of the first access sharing relationship is also the access receiver in the second access sharing relationship.

16. (Original) The computer implemented method of claim 12, further comprising creating another access sharing relationship that is symmetrical to the access sharing relationship, such that an access provider in the another access sharing relationship is the access receiver in the access sharing relationship and an access receiver in the another access sharing relationship is the access provider in the access sharing relationship, creating a bi-directional access sharing relationship.

17. (Currently amended) The computer implemented method of claim 12, wherein the step for sharing shares access to at least one of [[an]] the entity and [[a]] the file.

18. (Original) The computer implemented method of claim 12, further comprising evolving the access rights of the receiver over time in response to changes in the access rights of the provider.

19. (Original) The computer implemented method of claim 12, wherein the access rights include access constraints.
20. (Original) The computer implemented method of claim 12, wherein the step of defining the subset includes removing from the subset another subset of access, wherein the another subset contains access for which a manage exclusion is applied, so that the evolution is deferred by the manage exclusion for a limited or unlimited period time during serial workflow.
21. (Original) The computer implemented method of claim 12, wherein the step of defining the subset includes adding to the subset another subset of access, wherein the another subset contains access for which a manage exclusion is released, so that access automatically evolves as a result of the completion of an iteration of serial workflow.
22. (Original) The computer implemented method of claim 12, wherein the access sharing relationship is defined between autonomous peers in a distributed network.
23. (Original) The computer implemented method of claim 22, wherein the access sharing relationship is defined between one company and another company.
24. (Original) The computer implemented method of claim 12, further comprising deferring an iteration of access evolution for some limited or unlimited period of time by a manage exclusion, providing serial workflow.
25. (Currently amended) The computer implemented method of claim 12, further including executing parallel workflow if access evolution is not deferred for some limited or unlimited period of time by a manage exclusion, providing parallel workflow.
- 26-93 (Cancelled)

94. (new) The computer implemented method of claim 17, wherein the entity comprises a tuple.

95. (New) The computer implemented method of claim 12, wherein the access receiver having a second set of access rights evolving as an automated function of the first set of rights by way of the shared subset, becomes a second access provider and shares at least a subset of the evolving second set of access rights with a second access receiver having a third set of access rights evolving as an automated function of the second set of access rights, wherein the access sharing relationship is at least one access sharing relationships in a network of access control.

96. (New) The computer implemented method of claim 12, wherein the access receiver is one of a plurality of access receivers and the access provider is one of a plurality of access providers, any access receiver becoming one of the plurality of access providers by granting access rights to any of the plurality of access receivers.

97. (New) The computer-implemented method of claim 96, wherein the step of granting access rights to any of the plurality of access receivers creates a hierarchical tree of derived and evolving access.

98. (New) The computer-implemented method of claim 12, wherein after the step of sharing the subset with the access receiver, any changes made by the access receiver to the entity or the file related to the subset automatically flow back to the access provider as long as the manage exclusion remains released.

99. (New) The computer-implemented method of claim 12, wherein the step of sharing the subset with the access receiver shares the entity or file in real-time, subject to the evolving access rights of the access receiver.

100. (New) A computer program product embodied in a computer readable storage medium as computer executable instructions for implementing access evolution for

automating the sharing of access rights in a computer environment having one or more access sharing relationships, the instructions when executed by a computer performing the steps of:

a) creating an access sharing relationship in which an access provider having a first set of access rights shares at least a subset of the first set of access rights with an access receiver having a second set of access rights, so that the second set of access rights evolves as an automated function of the first set of access rights by way of the shared subset, wherein the access sharing relationship is one of one or more access sharing relationships in a network of access control;

b) defining the subset based on constraints of the access sharing relationship; and

c) sharing the subset with the access receiver,

whereby the steps of defining and sharing comprise an iteration of access evolution,

wherein the access provider has access rights to a newer version of an entity or file and the access receiver has access rights to an older version of the entity or file and deferring the sharing of the access rights to the newer version with the access receiver for a period of time, so that the access receiver has access to the older version prior to releasing a manage exclusion, and upon releasing a manage exclusion, the access receiver receiving access to the newer version, and

wherein the steps of creating, defining, and sharing are performed by a computer.

101. (New) The computer program product of claim 100, wherein the sharing is implemented by derived access control, such that the access receiver derives access from the provider.

102. (New) The computer program product of claim 100, wherein the access sharing relationship is a first access sharing relationship further including creating a second access sharing relationship in the computer environment, wherein the access receiver of the first access sharing relationship is also the access provider in the second access sharing relationship.

103. (New) The computer program product of claim 100, wherein the access sharing relationship is a first access sharing relationship further comprising creating a second access sharing relationship in the computer environment, wherein the access provider of the first access sharing relationship is also the access receiver in the second access sharing relationship.

104. (New) The computer program product of claim 100, further comprising the step of creating another access sharing relationship that is symmetrical to the access sharing relationship, such that an access provider in the another access sharing relationship is the access receiver in the access sharing relationship and an access receiver in the another access sharing relationship is the access provider in the access sharing relationship, creating a bi-directional access sharing relationship.

105. (New) The computer program product of claim 100, wherein the step for sharing shares access to at least one of the entity and the file.

106. (New) The computer program product of claim 100, further comprising the step of evolving the access rights of the receiver over time in response to changes in the access rights of the provider.

107. (New) The computer program product of claim 100, wherein the access rights include access constraints.

108. (New) The computer program product of claim 100, wherein the step of defining the subset includes removing from the subset another subset of access, wherein the another subset contains access for which a manage exclusion is applied, so that the evolution is deferred by the manage exclusion for a limited or unlimited period time during serial workflow.

109. (New) The computer program product of claim 100, wherein the step of defining the subset includes adding to the subset another subset of access, wherein the another subset contains access for which a manage exclusion is released, so that access automatically evolves as a result of the completion of an iteration of serial workflow.

110. (New) The computer program product 100, wherein the access sharing relationship is defined between autonomous peers in a distributed network.

111. (New) The computer program product of claim 110, wherein the access sharing relationship is defined between one company and another company.

112. (New) The computer program product of claim 100, further comprising the step of deferring an iteration of access evolution for some limited or unlimited period of time by a manage exclusion, providing serial workflow.

113. (New) The computer program product of claim 100, further including executing parallel workflow if access evolution is not deferred for some limited or unlimited period of time by a manage exclusion, providing parallel workflow.

114. (New) The computer program product of claim 105, wherein the entity comprises a tuple.

115. (New) The computer program product of claim 100, wherein the access receiver having a second set of access rights evolving as an automated function of the first set of rights by way of the shared subset, becomes a second access provider and shares at least a subset of the evolving second set of access rights with a second access receiver having a third set of access rights evolving as an automated function of the second set of access rights, wherein the access sharing relationship is at least one access sharing relationship in a network of access control.

116. (New) The computer program product of claim 100, wherein the access receiver is one of a plurality of access receivers and the access provider is one of a plurality of access providers, any access receiver becoming one of the plurality of access providers by granting access rights to any of the plurality of access receivers.

117. (New) The computer program product of claim 116, wherein the step of granting access rights to any of the plurality of access receivers creates a hierarchical tree of derived and evolving access.

118. (New) The computer program product of claim 100, wherein after the step of sharing the subset with the access receiver, any changes made by the access receiver to the entity or the file related to the subset automatically flow back to the access provider as long as the manage exclusion remains released.

119. (New) The computer program product of claim 100, wherein the step of sharing the subset with the access receiver shares the entity or file in real-time, subject to the evolving access rights of the access receiver.